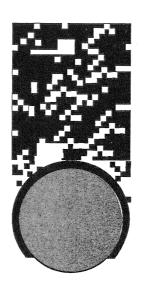
Strategic Regional Arterial

U.S. 12 (Rand Road) Illinois 31 to Illinois 58



Operation GreenLight

Illinois Department of Transportation Issued: March 1996

Foreword

U.S. Route 12 (Rand Road) is a Strategic Regional Arterial (SRA) from Illinois 31 to Illinois 58 (Golf Road). CH2M HILL Inc., has prepared this SRA report for U.S. Route 12 for the Illinois Department of Transportation and the Strategic Regional Arterial Subcommittee of the Work Program Committee of the Chicago Area Transportation Study.

As a SRA route, U.S. Route 12 is intended to function as part of a regional arterial system, carrying long-distance as well as local traffic in conjunction with other SRA routes and the regional expressway and transit systems. This report is one element of a long-range plan for all routes in the SRA network. Together, the route studies constitute a comprehensive, coordinated plan for the entire SRA network.

This report includes a description of the SRA study objectives and process, a detailed exposition and analysis of the existing route conditions, recommendations for ultimate and basic improvements, and documentation of the public involvement process including citizen comments.

U.S. 12 SRA

Summary of Recommendations

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For study purposes, the U.S. 12 Strategic Regional Arterial (SRA) was divided into six segments (see Exhibit S-1, attached following this section). The following is a summary of the major recommendations for each segment.

SRA Segment I: Illinois 31 to State Park Road (7.0 Miles)

- From Illinois 31 to North Solon Road and from May Lane to Johnsburg Wilmot Road, two through lanes in each direction with an 18-foot raised median, generally within 100 to 110 feet of right-of-way, requiring acquisition of up to 30 feet of right-of-way
- From North Solon Road to May Lane and from Johnsburg Wilmot Road to Fox Lake Road, two through lanes in each direction of travel with an 8-foot raised median, within existing right-of-way (80 to 105 feet)
- At major intersections such as Illinois 31, intersection capacity, channelization, and signalization improvements
- New potential signalized intersections are proposed at East Solon Road,
 Sherwood Forest Drive, and Richardson Road
- Geometric improvements to at-grade, stop-controlled intersection at Kuhn Road, with relocated at-grade railroad crossing
- Relocation of North Solon Road to intersect with East Solon Road, remove North Solon Road intersection at U.S. 12
- Develop future access roads between Sherwood Forest Drive and Winn
 Road to accommodate access to future land use

SRA Segment II: State Park Road to Illinois 59 (3.0 Miles)

• From State Park Road to approximately Kings Drive, maintain the existing cross section, two through lanes in each direction with a 10- to 12-foot

- flush median, generally within 64 to 110 feet of right-of-way, requiring no additional right-of-way
- From Kings Drive to Illinois 59, maintain existing cross section, two through lanes in each direction with a 10- to 12-foot flush median, two way frontage roads provided on each side of U.S. 12
- Improve geometrics of U.S. 12 and Oak Street intersection by relocating and reconstructing existing intersection
- New potential signalized intersection at Kings Drive, restrict cross-median access at intersection just south of Kings Drive
- Develop access management/access consolidation plan along U.S. 12 through Fox Lake

SRA Segment III: Illinois 59 to Bonner Road (6.3 Miles)

- From Illinois 59 to Bonner Road, three through lanes in each direction with a 40-foot open median with open drainage, within 200 to 300 feet of right-of-way; 100 feet of additional right-of-way is required north of "old" Illinois 120 to relocated Illinois 120.
- Modify the Illinois 59 interchange, develop two-lane exit northbound to drop third though lane along U.S. 12, develop southbound entrance as an add lane design to add third through lane southbound along U.S. 12
- Add two-way frontage roads south from Illinois 134 (Big Hollow Road) to Brandenburg Road to obtain continuous frontage road system
- Develop future access roads between Molidor Road and Fox Lake Road to serve anticipated future development
- Reconstruct Fox Lake Road intersection with U.S. 12
- Extend Callahan Road west to U.S. 12, develop conventional "T" intersection with U.S. 12

New potential signalized intersections are proposed along U.S. 12 at seven locations, including U.S. 12 intersections with Brandenburg Road, Molidor Road, Fox Lake Road, Future Access Road (south of Illinois 120), Future Access Road (north of Case Road), Case Road, and Old Rand Road/Callahan Road; channelization and capacity improvements are also recommended at these locations, with all signal spacing greater than 1/4 mile

SRA Segment IV: Bonner Road to Miller Road (5.7 Miles)

- From Bonner Road to Miller Road, three through lanes in each direction with an open 40-foot median, open drainage, within 200 feet of right-of-way, typical section requires no additional right-of-way
- Provide auxiliary lane southbound along U.S. 12 between Illinois 176 and Illinois 59, to facilitate weaving traffic, requiring 5 feet of additional right-of-way
- Develop continuous right-turn lane along northbound U.S. 12 south of Bonner Road and southbound along U.S. 12 between Lake Shore Drive and McHenry Road, requiring 5 feet of additional right-of-way
- Develop two-way frontage roads along northbound U.S 12 from Ivanhoe Road to Illinois 59 and along northbound and southbound U.S. 12 north of Miller Road; additional right-of-way will be required
- Restrict access to interchanges at Illinois 176 and Illinois 59, remove all local access, construct cul-de-sacs at Slocum Lake Road, construct local access road to provide alternate access at Illinois 176 southbound entrance ramp
- Restrict access at Ivanhoe Road, permit right turn in and right turn out only
- Extend Timberlake Drive east across U.S. 12 to serve potential future development, potential new signalized intersection

• Provide future signal at Wynstone residential development, extend roadway east to serve Mount St. Joseph's Community Children's Home property east of U.S. 12

SRA Segment V: Miller Road to Lake-Cook Road (6.1 Miles)

- From Miller Road to south of North Old Rand Road, three through lanes in each direction with an open 40-foot median, open drainage, within 200 feet of right-of-way, requiring no additional right-of-way
- From south of North Old Rand Road to South of Quentin Road, three through lanes in each direction of travel with a 30-foot raised median, closed drainage, within 130 to 150 feet of right-of-way, requiring the acquisition of about 30 feet of right-of-way just north of Quentin Road
- From south of Quentin Road to Lake-Cook Road, three through lanes in each direction of travel with a 16-foot raised median, within 120 feet of right-of-way, requiring the acquisition of about 20 feet of additional right-of-way
- Realign/relocate the U.S. 12 and Old Rand Road intersection (north of Cuba Road) approximately 500 feet to the west to intersect at right angle
- Between Ravinia Terrace and Signal Hill Road, provide right-in/right-out access only at Country Club Road and Wilmette Terrace, provide cul-desacs at Glencoe, Winnetka, Kenilworth, Evanston Terrace, and Whitney Road; develop new signalized intersection at Signal Hill Road
- Develop future local access road along U.S. 12 between Long Grove Road and Lake-Cook Road to provide access to existing and future development (location to be determined)
- Extend Plum Grove Road south from U.S. 12 to intersect with Lake-Cook Road, develop conventional 4-leg intersection at U.S. 12

• Intersection channelization improvements including dual left-turn lanes along U.S. 12 at the SRA to SRA intersections of Illinois 22, Quentin Road and Lake-Cook Road

SRA Segment VI: Lake-Cook Road to Golf Road (6.1 Miles)

- From Lake-Cook Road to south of Illinois 53, three 12-foot through lanes in each direction with an 18-foot raised median, within 120 feet of right-of-way, requiring 10 feet of additional right-of-way along both sides of U.S. 12
- From south of Illinois 53 to north of Hintz Road, three 11-foot through lanes in each direction of travel, with a 4-foot raised median, closed drainage, within existing right of way of 100 feet
- From Hintz Road to Arlington Heights Road, from Palatine Road to Camp McDonald Road, from north of Schoenbeck Road to Business Center Drive, from North of Mount Prospect Road to south of Central Road, and from 3rd Avenue to Golf Road, three 11-foot through lanes in each direction of travel, with a raised 16-foot median, and closed drainage, within 110 feet of right-of-way, requiring an additional 5 feet of right of way from both sides of U.S. 12
- From Arlington Heights Road to Palatine Road, three 11-foot through lanes, with a raised 30-foot median, and closed drainage within 130 feet of right-of-way
- From south of Camp McDonald Road to north of Schoenbeck Road, three 11-foot through lanes in each direction of travel, with a flush 11-foot median and close drainage, within existing right-of-way
- From south of Central Road to north of 3rd Avenue, three 11-foot through lanes in each direction of travel, with a raised 4-foot median, and closed drainage, within existing right-of-way (100 feet)
- South from Lake-Cook Road to south of Hicks Road, develop a two-way future access road on east side of U.S. 12 (location to be determined)

- Extend Williams Drive to the north across U.S. 12 to provide continuity between Dundee Road to U.S. 12
- Extend Hintz Road to the south across U.S. 12 adjacent to utility line, tie to existing frontage road parallel to Illinois 53
- Develop new signalized access roads east and west of the Elmhurst Road/Kensington Road/U.S. 12 intersection triangle, eliminate left turns off of U.S. 12 at Elmhurst Road and Kensington Road
- Develop new circulation road south of Central Road, provide future signalized intersection, eliminate left turns from Central Road to U.S. 12
- Extend Camp McDonald Road west to tie with Oakton Street
- Provide future signalized intersection at new access road south of Hicks
 Road as well as at new circulation roads north and south of Elmhurst
 Road/Kensington Road/U.S. 12 intersection triangle and south of Central
 Road
- Construct intersection channelization improvements including dual left-turn lanes along U.S. 12 at the SRA to SRA intersection of Golf Road (Illinois 58) and Palatine Road, as well as the major intersections of Dundee Road and Arlington Heights Road and Euclid Avenue with U.S. 12

